SAFETY BUREAU CIVIL ADRONAUTICS BOARD Washington 25, D. C.

January 15, 1944

PROPOSED REVISION OF FART 60 OF THE CIVIL AIR REGULATIONS

The Civil Aeronautics Board has authorized the Safety Bureau to submit the attached draft of proposed revision of the Air Traffic Rules, Part 60 of the Civil Air Regulations, for preliminary comment by interested persons prior to the consideration by the Board of the proposed revised regulations. This proposal has been prepared under general instructions from the Board to the effect that:

- 1. Part 60 should be substantially shortened and simplified,
- 2. Part 60 should, to the extent practicable, include only regulations which have as their ourpose the avoidance of danger to others, particularly by collisions, and the expedition of air traffic, and
- 3. The purpose of the regulations should be to protect the lives and property of the public from careless flying rather than to protect the pilot from his own carelessness.

The attached draft has been prepared along these lines and necessarily includes many drastic departures from previous regulations on this subject. One of the most important changes upon which comment is particularly requested is the elimination of many specific restrictions and the substitution for them of a regulation which merely forbids the careless and reckless operation of aircraft when it endangers the life or property of another person. The previous provisions governing minimum flight altitudes, forbidding flying in close proximity to other aircraft, and forbidding the performance of acrobatics except under specified conditions are examples of rules which are to be deleted from the regulations. You will also note that previous rules requiring the use of parachutes while performing acrobatics and the carriage of an adequate fuel supply when operating under contact conditions have been eliminated.

Some of the provisions of the present Part 60 which do not appear in the revision are not to be deleted entirely from the regulations but will appear in subsequent revision of another part. These regulations will include such matters as identification marks, equipment required for instrument flight, types of pilot certificates required, the certiage of explosives, and the requirement for foreign flight authorizations. They are being revised with the same general objectives in mind as have governed the preparation of the attached draft of Part 60 and will be distributed for comment within a few weeks. It also should be noted that certain provisions temperarily included in Part 60 because of wartime requirements may have to be retained for the duration of the war.

As this revision contains several substantial departures from present regulations it is desired that those who are interested in improving and simplifying the Civil Air Regulations give us as much assistance through constructive criticism as is possible. It will be appreciated if your comments and criticisms can be transmitted to the Safety Bureau, Civil Aeronautics Board, by March 15, 1944. If those who are interested in commenting on this revision feel that a public hearing or public hearings would be of value, they should so indicate in their responses.

Jesse W. Lankford Director, Safety Bureau

PROPOSED REVISION OF PART 60--AIR TRAFFIC RULES

The following air traffic rules govern the flight of aircraft and include rules as to safe altitudes of flight and rules for the prevention of collisions between aircraft and between aircraft and other objects.

60.0 General flight rules.

- 60.01 Airspace restrictions. Flight of aircraft in the following areas involves special restrictions or considerations: (See Note 1)
- (a) Caution area. An area designated by the Administrator in which a visible hazard to aircraft in flight exists. Flight in this area should be avoided if practicable.
- (b) Danger area. An area designated by the Administrator in which an invisible hazard to aircraft in flight exists. Aircraft must not be flown in such an area without specific authority issued by the agency having jurisdiction.
- (c) Prohibited area. An area established by Executive Order of the President of the United States. Aircraft must not be flown in such an area except aircraft actually engaged in defense missions, or otherwise in accordance with the Executive Order establishing such areas.
- 60.02 Traffic control instructions. A pilot must adhere to traffic control instructions received from an airway traffic control center or an air traffic control tower of the Administrator.
- 60.020 Suspension of air traffic. An airway traffic control center or air traffic control tower of the Administrator for reasons of public safety may temporarily suspend any or all flight in a control area.
- 60.03 Reckless flying. No person shall pilot an aircraft in a reckless or negligent manner so as to endanger the life or property of another.

60.04 Right-of-way rules.

- (a) Order. Aircraft in flight have the right-of-way in the following order: (1) balloons, fixed or free (an airship not under control is classed as a free balloon), (2) gliders, (3) airships, and (4) airplanes, including rotor planes.
- (b) <u>Crossing</u>. When two aircraft are on crossing courses at approximately the same altitude, the aircraft which has the other on its left shall have right-of-way, and the other aircraft must give way.
 - Note 1: Restricted areas are indicated on aeronautical charts and published in Weekly Notice to Airmon, issued by the Administrator of Civil Aeronautics.

- (c) Approaching head-on. When two sircraft are approaching head-on, or approximately so, and there is danger of collision, each must alter its course to the right so that they will pass each other at a safe distance.
- (d) Overtaking. An overtaken aircraft has the right-of-way and the overtaking aircraft must alter its course to the right so as to keep clear of the other sireraft.
- (e) Landing. An aircraft while landing or maneuvering in preparation to land has the right-of-way over other aircraft in flight, or on the ground or water. Aircraft at a higher altitude not in an established traffic pattern must give way to an aircraft at a lower altitude.
- (f) Distress landing. An aircraft in distress has the right-of-way in attempting to land.
- 60.05 Right side traffic. Aircraft operating along a civil airway must keep to the right of the radio range course projected along the airway, or if no redic range course is projected along the airway, must keep to the right of the center line of the airway, except:
 - (a) when impracticable for reasons of safety;
- (b) when otherwise instructed or authorized by an airway traffic central center of the Administrator;
- (c) imbound eircraft operating on instruments and using the on-course signal of the radio range; or
 - (c) when landing or taking off.
- 60.050 Crossing range approach channel. Aircraft crossing a range approach channel must give way to aircraft proceeding along and within the range approach channel, and in addition, aircraft when crossing a range approach channel more than 1,500 feet above the ground or water must do so at a constant altitude and at an angle of not less than 45°.

60.06 Aircraft lights. Between sunset and sunrise

- (a) aircraft parked or moved within a lighted landing area must display sufficient lights to mark the location of the aircraft unless otherwise illuminated;
- (b) scaplanes on the water must display the lights required by the regulations of the United States governing the navigation of vessels on the water; and
 - (c) aircraft in flight must display position lights.

- 60.07 Distress signals. Signals used in case of distress must, where practicable, be as follows:
 - (a) S 0 S for radiotelegraphy,
- (b) MAYDAY for radictelephony, (When, owing to the rapidity of the maneuvers to be accomplished, an aircraft is unable to transmit the intended message, the signal P A N not followed by a message retains such meaning.)
 - (c) NC for international code flag signals of distress, and
- (d) A square flag having either above or below it a ball, or anything resembling a ball.
- 60.08 Fog signals. In fog, mist, or heavy weather, an aircraft on the water in navigation lanes must signal its presence by a sound device emitting a signal for about five seconds at one-minute intervals.
- 60.09 Emergency rules. The air traffic rules do not apply to emergency situations where immediate action is required to avoid danger which could not have been reasonably foreseen, unless the emergency situation shall be found to have been caused by the carelessness or intentional acts of the pilot.
- 60.1 Contact flight rules. In addition to the preceding general rules, the following rules govern flight when the attitude of the aircraft and its flight path can at all times be controlled by means of visual reference to the ground or water:
- 60.10 Weather minimums. Flight under contact flight rules may be made only if there is a cailing of at least 1,000 feet and visibility of at least three miles except when made in a control zone and cleared by the air traffic control tower.
- 60.11 Weather changes. If weather conditions below the minimum prescribed are anticipated or are encountered en route, a landing must be made as quickly as practicable or the course of the flight altered so that it may be made in contact flight weather unless such flight can and does proceed in accordance with the instrurent flight rules.
- 60.12 Flights in the vicinity of landing areas. Flights in the vicinity of landing areas must comply with the following rules:
- (a) Aircraft approaching for a landing must comply with the established traffic pattern or circle the landing area sufficiently to observe other traffic, unless other instructions are received from the air traffic control tower.
- (b) Aircraft taking off from a landing area must conform to the established traffic pattern, if any.
- (c) All other aircraft flying below 1500 feet must deviate to the right sufficiently to avoid at a safe distance flights under (a) and (b) above.

- (d) All turns when approaching for a landing or after take-off must be to the left unless otherwise directed by an air traffic control tower or unless the Administrator has prescribed a different procedure for the landing area.
- 60.2 Instrument flight rules. Flight under the following conditions must be made according to instrument flight rules:
- (a) in weather conditions in which the visibility is less than three miles or the ceiling less than 1,000 feet, or
- (b) in closer preximity than 500 feet vertically or 2,000 feet horizontally to a cloud formation, or
- (c) whenever the attitude of the aircraft and its flight path cannot be controlled at all times by visual reference to the ground or water.
- 60.21 Fuel requirements. Sufficient fuel and cil, considering the wind and other weather conditions forecast, must be carried:
- (a) to complete the flight to the point of the first intended landing, and thereafter
- (b) to fly to and land at an alternate airport designated in the approved flight plan, and thereafter
- (c) to fly, at normal cruising consumption, for a period of 45 minutes.
- 60.22 Alternate sirport. At least one alternate sirport must be specified in the flight plan where the weather reports and forecasts indicate the weather conditions are and will remain, until time of expected arrival, at or above a ceiling of 1,000 feet and visibility of three miles.
- 60.23 Instrument flight plan. Prior to take-off from any point within an airway traffic control area and prior to entering such an area, an approved flight plan must be filed with the airway traffic control center of the area in which the flight originates. No flight plan shall be submitted until after the pilot has made a careful study of available current weather reports and forecasts and believes the flight can be made with safety. Such flight plan must contain the following information:.....
 - (a) the aircraft identification mark;
- (b) the type of aircraft involved and the number of aircraft making the flight, if the aircraft are in formation and on only one flight plan;
- (c) the name of the pilet, or if in formation the name of the flight commander;
 - (d) the point of departure;

- (e) the cruising altitude or altitudes and the route to be followed;
- (f) the point of first intended landing;
- (g) the cruising airspeed;
- (h) transmitter frequency;
- (i) the time of departure;
- (j) the estimated elapsed time until arrival on the ground at the point of first intended landing;
 - (k) the alternate airport or airports; and
- (1) any other pertinent information which the pilot deems useful for central purposes or which may be requested by an airway traffic control center.
- 60.230 Flight plan changes. A change must not be made en route in any approved flight plan until approval has first been obtained from the airway traffic control center of the Administrator for the area in which the flight is progressing, unless an emergency situation arises which requires immediate decision and action, in which case, as soon as possible after such emergency authority is exercised, the pilot must inform the proper control center of the new flight plan and obtain approval therefor.
- 60.231 Notification of arrival. If the pilot of an aircraft has submitted, or authorized the submission of, a flight plan, he must, immediately upon landing or upon completion of the flight, file an arrival notice for transmission to the point of departure.
- 60.24 Weather minimums. A flight must not be made to or from any airport or landing area when the ceiling is loss than 600 feet or the visibility is less than one mile unless cleared by an air traffic control tower operator of the Administrator on duty in such area.
- 60.25 Weather changes. If weather reports available to the pilot en route indicate that the weather conditions will be below 500 feet or one mile at the airport of destination at the expected time of arrival, the pilot must proceed to an alternate airport where the ceiling and visibility expected to prevail on arrival are at least 1,000 feet and three miles, respectively.
- 60.26 Communication contacts. The pilot must maintain a continuous listening watch on the appropriate radio frequency and must, by radio, contact and report as soon as possible to the appropriate communication station the time and altitude of passing each radio fix or other check point designated by the Administrator or specified in the flight plan together with unanticipated weather conditions being encountered and any other information pertinent to the aircraft movement.

- 60.260 Communication facilities. Aircraft utilizing air carrier communication facilities must transmit information as required in this paragraph through such facilities, or such information may be transmitted directly by radio, to the appropriate agency of the Administrator. (See Note 2)
- 60.261 Communication failure. In the event of inability to maintain two-way communication with the appropriate communication station one of the following procedures must be observed:
 - (a) Proceed in accordance with contact flight rules, or
 - (b) Land as soon as practicable, or
- (c) Proceed according to the approved flight plan, including any amended instructions issued and acknowledged en route, maintaining the last acknowledged assigned altitude until the approach time last authorized, at which time a landing may be made. (See Note 3)
- 60.27 Flight eltitudes. Unless different altitudes are assigned by an airway traffic control center of the Administrator, the following flight altitudes govern flights made in accordance with instrument flight rules:

60.271 Along green or red civil airways.

- (a) Eastbound. Aircraft making good a true course of from 0° (or 360°) to, but not including, 180° must fly at an odd thousand-foot level above sea level (such as 3,000, 5,000, or 7,000 feet).
- (b) <u>Westbound</u>. Aircraft making good a true course of from 130° to, but not including 360° or (0°) must fly at an even thousand-foot level above sea level (such as 2,000, 4,000, or 6,000 feet).

60.272 Along blue or amber civil airways.

- (a) Northbound. Aircraft making good a true course of from 270° to, but not including 90°, must fly at an odd thousand-foot level above sea level (such as 3,000, 5,000, or 7,000 feet).
- (b) Southbound. Aircraft making good a true course of from 90° to, but not including 270° must fly at an even thousand-foot level above sea level (such as 2,000, 4,000, or 6,000 feet).
 - Note 2: For further information concerning aids to air navigation, see Air Navigation Radio Aids, published periodically by the Administrator of Civil Aeronautics.
 - Note 3: Normal traffic will resume as soon as the aircraft has landed or been accounted for, but in any event in not more than 30 minutes after the approach time last authorized for the aircraft and acknowledged by the pilot of such aircraft.

60.28 Crossing a civil airway. Unless otherwise instructed by an airway traffic central center of the Administrator, a civil airway must not be crossed at an angle of less than 45° to such airway.

60.3 Miscellaneous Rules

- 60.30 Parachute jump rules. A person must not make any exhibition, test, training, or demonstration parachute jump, and no pilot or person in command of civil aircraft in flight shall permit any such parachute jump, unless the jumper is at all times at least 500 feet below and 2,000 feet horizontally from any cloud formation; and unless reasonable precautions are taken to ascertain that such jump will not create undue hazards to other aircraft in flight or persons on the ground.
- 60.31 Air meet rules. An air meet must not be held or conducted, or suthorized to be held or conducted, within the United States unless a certificate of waiver covering the activities of such meet is issued by the Administrator. All activities conducted under authority of such waiver must comply with the conditions and terms set forth therein. (See Note 4)
- 60.32 Certificate of waiver. When in the opinion of the Administrator (I) the public interest will be best served by the nonobservance of any part of the air traffic rules for a particular activity and for a limited period of time and (2) such nonobservance will not adversely affect safety in air commerce, a certificate of waiver may be issued by the Administrator.
- 60.320 Duration. The duration of a certificate of waiver must be limited to the period prescribed on such certificate, except that it shall immediately expire at any time an authorized inspector of the Administrator shall demand the surrender of such certificate after inspection or examination.
- 60.4 Definitions. (It is thought advisable to delay the final drafting of definitions until comments on the proposals herein are received.)

Note 4: Application for a certificate of waiver for an air meet should be made to the Administrator at least 15 days prior to the proposed air meet.